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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,014	04/10/2001	Thomas Scharfe	P 279247 000121 FH	9559

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PILLSBURY WINTHROP, LLP  
P.O. BOX 10500  
MCLEAN, VA 22102

EXAMINER

HAILEY, PATRICIA L

ART UNIT	PAPER NUMBER
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1755

8

DATE MAILED: 08/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

my-8

# Office Action Summary

Application No.

09/829,014

Applicant(s)

SCHARFE ET AL.

Examiner

Patricia L. Hailey

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on June 17, 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

Applicants' remarks and amendments, filed on June 17, 2002, have been carefully considered. Claim 18 has been canceled; no new claims have been added.

Claims 1-17 remain pending in this application.

The 103(a) rejection of claims 1-18 over Mangold et al. (U. S. Patent No. 6,328,944) in view of Cochrane (U. S. Patent No. 5,116,535), stated in the previous Office Action, has been withdrawn in view of Applicants' persuasive argument that the Mangold et al. reference may not be used to make an obviousness rejection under the provisions of 35 U.S.C. § 103(c).

#### ***New Ground(s) of Rejection***

The following New Ground(s) of Rejection is (are) based on Canadian Published Application No. 2,223,377, submitted by Applicants.

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 103***

2. **Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canadian Published Application No. 2,223,377, submitted by Applicants, in view of Cochrane (U. S. Patent No. 5,116,535).**

The Canadian Published Application is equivalent to Mangold et al. (U. S. Patent No. 6,328,944), and teaches doped pyrogenically prepared oxides. They are doped with

one or more doping components in amounts of 0.00001 to 20 wt. % (based on the total amount of pyrogenic oxide and doping component), wherein the doping amount ranges from 1 to 10,000 ppm. The doping components are non-metal and/or metal, a non-metal salt and/or a metal salt, or an oxide of a metal and/or a non-metal. The doped oxides have BET surface areas between 5 and 600 m<sup>2</sup>/g. See the Abstract of the Published Application.

The doped oxides are prepared via aerosol technology and flame hydrolysis, wherein the doping medium is finely distributed in the gas phase during the initial stages of production of the pyrogenic oxide, so that homogeneous incorporation of the doping component in the pyrogenically prepared oxide is possible. See claim 3 of the Published Application.

The doped oxides can be used as, for example, fillers, starting materials for preparing dispersions, as polishing materials, in the electronic industry, etc. See claim 7 of the Published Application. This disclosure is considered to read upon the claim limitation "coating mixture".

While this reference discloses that the doped pyrogenic oxides are useful as starting materials for preparing dispersions, this reference does not disclose a method for preparing dispersions.

Cochrane teaches aqueous dispersions of fumed silica, wherein the silica is produced by flame hydrolysis of silicon tetrachloride. The dispersions have silica concentrations of at least about 35% by weight. See col. 3, lines 51-61 of Cochrane.

The dispersions are prepared by admixing the fumed silica (which has a surface area ranging from about 10 and 75 m<sup>2</sup>/g, see col. 3, lines 17-27 of Cochrane) with water in a mixer such as a high shear mixer. See col. 4, line 4 to col. 5, line 38 of Cochrane.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to produce dispersions of the pyrogenic oxides of the Published Application via the process of Cochrane and thus obtain Applicants' claimed dispersion and the claimed method of preparing it, because both the doped oxide and the fumed silica are prepared by the same method (flame hydrolysis) and exhibit substantially the same surface areas. Further, because the pyrogenic doped oxides of the Published Application are useful starting materials for preparing dispersions (see col. 3, lines 26-29 of Mangold et al.), one of ordinary skill in the art would expect that any known method for preparing dispersions, such as that disclosed by Cochrane, can be performed with the doped oxides of the Published Application as starting materials.

### *Response to Arguments*

In response to Applicants' arguments that the cited references do not teach the now claimed coating mixture and the claimed process for preparing said coating mixture, it is the Examiner's position that because the cited references teach the feasibility in employing the doped oxides as starting materials for dispersions, preparing a dispersion with the prior art doped oxides comparable to that instantly claimed would be expected by one of ordinary skill in the art. The references are

presently seen to read upon the claim limitation "coating mixture", in view of Applicants' claims in their present form. Additionally, Applicants' recitation of the phrase "coating mixture for an inkjet paper or inkjet film" is considered to be one of intended use.

With respect to Applicants' arguments that the claimed invention exhibits superior properties when compared to undoped oxides, it is the Examiner's position that Applicants have not presented any convincing evidence supporting this argument, with respect to the prior art. Applicants have not presented any convincing evidence that the doped oxides of the Published Application could or would not serve as a suitable coating mixture, or could or would not be comparable to that instantly claimed.

For these reasons, Applicants' arguments are not persuasive.

### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' Priority Document was filed on April 10, 2001.

### ***Conclusion***

4. Applicant's amendment (amending the claims to recite a coating mixture and a process for its preparation, as opposed to a dispersion and process for its preparation) necessitated the new ground(s) of rejection presented in this Office action. Accordingly,

**THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

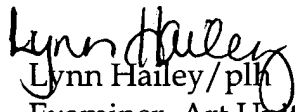
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (703) 308-3317. The examiner can normally be reached on Mondays-Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on (703) 308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.

  
Lynn Hailey/plh  
Examiner, Art Unit 1755  
August 14, 2002

  
Mark L. Bell  
Supervisory Patent Examiner  
Technology Center 1700